



PACCLIM 2006 ABSTRACT FORMAT

Please use the following format for Abstracts for both oral and poster presentations at the PACCLIM Workshop at the Asilomar State Beach and Conference Grounds, Pacific Grove, March 26-29. Abstracts should be sent no later than **February 1, 2006** to:

Scott W. Starratt
Volcano Hazards Team, MS 910
U.S. Geological Survey
345 Middlefield Road
Menlo Park, CA 94025

We would prefer to receive an electronic copy for ease of reproductions. For e-mail, send it as a Microsoft Word document to sstarrat@usgs.gov.

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Example of abstract:

CLIMATE VARIABILITY AND PLANT MIGRATIONS

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Climate change has long been recognized as a primary cause of plant distribution changes through both range expansions and contractions. The specific role of climate variability in dictating migrations, however, is often poorly addressed. Past climate change initiated widespread natural plant migrations, but climate variability over centennial and millennial timescales may have served as a pacing mechanism of species advances. Pulses in plant migrations at scales of 10^1 to 10^3 years are likely linked to climate fluctuations at similar timescales, including oscillations associated with ENSO, Pacific Decadal Variability, and apparent millennial-scale variations in the Pacific Ocean complex. The effect of climate variability is also species dependent; particular changes in the climate system may prompt migration of some species but halt or postpone others. Climate variability may also help explain the rapid migration rates of species observed following deglaciation. Short pulses of suitable climate may permit the establishment of small satellite populations well in advance of the advancing core population. Persistence of these satellite populations through unsuitable climatic conditions would provide seed sources for further expansion under a return to favorable climatic conditions. Understanding climatic conditions that determine individual species responses will help refine our interpretations of past climate changes based on past species migrations. In addition, more comprehensive knowledge of the nature of climate variability and plant migrations will aid in estimation of future natural plant migrations under a changing global climate, as well as the expansion of non-native species.